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ABSTRACT

Designed to provide schools with the tools to start utilizing computers for student activity programs without additional expenditures, this handbook provides beginning computer users with suggestions and ideas for using computers in such activities as drama clubs, yearbooks, newspapers, activity calendars, accounting programs, room utilization, and chaperone coverage. Chapter topics include: (1) Technical Information; (2) Word Processing; (3) Number Crunching; (4) Databases; (5) Telecommunications; (6) Special Programs; (7) Activity Idea Sheets; (8) Getting Started; and (9) Getting a Computer. Examples of spread sheet pages (VISICALC) and databases (PROFILE) are included to illustrate ways of using popular software packages, and four ways that computers can be used to communicate are explored, i.e., microcomputer to microcomputer, microcomputer to mainframe computer, microcomputer to database, and microcomputer to communications network. Computer applications and program ideas are suggested for four activity areas: the performing arts, publications, common interest clubs, and student councils. Concluding hints for acquiring a computer include investigation of current school and community resources, donations, and borrowing time on an existing system. (JB)

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# COMPUTERS + STUDENT ACTIVITIES HANDBOOK

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STUDENT ACTIVITIES MANAGER
SCHEDULED ACTIVITIES
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* NATIONAL HONOR SOCI
* DEBATE TEAM
* YEARBOOK
* NEWSPAPER
* DRAMA CLUB
* CHEERLEADERS
* SENIOR PROM
* INTERNATIONAL CLUB

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# COMPUTERS + STUDENT ACTIVITIES HANDBOOK

By Elliott Masie
and
Michele Stein

National Association of Secondary School Principals
Division of Student Activities
1904 Association Drive
Reston, Virginia 22091

**Computers and Student Activities Handbook** was developed for the Division of Student Activities by Elliott Masie and Michele Stein of the National Student Leadership Center.

Elliott Masie is the director of the Center and is a nationally known consultant and writer in the fields of leadership development, training skills, and humane approaches to using computers.

Michele Stein is a consultant and writer for the Center, working in the areas of student leadership development and recently in the computer applications field.

The National Student Leadership Center is a project of Sagamore Institute, a non-profit, tax-exempt educational resource organization and conference center located in New York State.

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**1904 Association Dr., Reston, Va. 22091**

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# FOREWORD

Computers can help you better manage your school's student activities programs. These powerful machines can provide several sets of hands for any student organization. Paperwork, budgets, letter writing, and communication with other clubs can be made easier by the appropriate use of computers. Records can be organized for easy access by principals, advisers, and student leaders.

Few other computer uses provide students with real data and allow their results to improve an actual organization. Increased computer literacy is a predictable outcome of the ideas outlined in this handbook.

The Division of Student Activities is proud to place student activities on the cutting edge of technology. We are pleased to have collaborated with Sagamore Institute's National Student Leadership Center on this exciting project.

This handbook will provide schools across the country with the tools to start using computers today, without spending any additional funds. Use the practical suggestions in this handbook to take your student activities programs into the future. Experiment and create new ways to use technology to improve your activities programs.

The Division looks forward to hearing about your experiences and sharing them with other schools across the country.

Scott D. Thomson
Executive Director
National Association of
Secondary School Principals

Terrence J. Giroux
Director
NASSP Division of
Student Activities

# INTRODUCTION

Welcome to the world of computers and student activities, one of the most exciting uses of microcomputers in education. Schools across the country are beginning to use computers in activities programs, with impressive results.

This partnership of technology and co-curricular activities creates a unique set of mutual benefits. Computers have the potential for increasing the effectiveness and organization of student activities. Student activities provide a good opportunity for teaching students about the latest in computer applications.

Best of all, no new expenditures are required. You can use the microcomputers currently in your school.

Before writing this book, we asked an important question:

**"Is it a good idea to introduce computers into the student activities area?"**

We wanted to be certain that this innovation would not result in students sitting at terminals instead of interacting with their peers and advisers. Our fears were put to rest as we discovered the real potential for computers in student activities. Computers can actually create more time for the central focus of student organizations.

• A drama club can spend more time producing and presenting a play if a word processing program can eliminate hours of typing and retyping scripts.

• Students working on yearbooks can spend more time creating interesting page layouts and design when a computer does the repetitive task of counting the number of letters in each line of type.

• Activity calendars can be updated in an instant, providing information on room utilization and chaperon coverage at every school event.

• Accounting programs can monitor monies collected and spent by clubs, while giving each group an up-to-date statement of their available funds.

This handbook contains hundreds of suggestions and ideas for using computers in student activities. You do not need to know anything about computers to understand the ideas presented. However, by the time you have finished reading these pages you will have learned a great deal about how to invent your own uses for computers.

# AN OVERVIEW

**"What can a computer do for a student activities program?"**

To answer that question we need a short overview of what a computer can do in general and a look at the ways these functions apply to a range of clubs and groups at a typical secondary school.

In this book, we will use the word computer to refer to a microcomputer, one of the desk-top machines that are making their way into our lives. Some of the brands of microcomputers that can be found in schools include Apple, IBM, Radio Shack, and Commodore.

Computers are very good at manipulating information. This is the core role of computers. There are several basic ways that computers receive, store, change, and give back information:

- Number Crunching
- Word Processing
- Data Base Management
- Telecommunications

Here is some detail:

**Number Crunching.** A computer is a whiz at working with numbers. Give a computer a series of numbers and it will do any kind of calculation that you can imagine, and at an amazing speed. Number crunching involves remembering numbers as well as doing calculations.

This talent for working with numbers makes the computer a wonderful tool to use when working with budgets. If a class council is considering sponsoring a dance, they will want to do several "what if" budget projections as they do their planning. With 175 attending, their cost is: band $200, clean-up $50, and punch 50 cents a glass. How much will they have to charge per ticket to cover expenses and have $100 profit for the class gift fund?

Sure, this calculation could be done with pen and paper quicker than you could enter the numbers into a computer. However, if you wanted to look at 200 combinations of prices charged and people attending, then the computer is a loyal and efficient numerical slave. One of the most common uses of a microcomputer is for this type of financial projection, often referred to as a "spreadsheet."

Almost every activity group has to keep a budget. A computer can keep track of all expenses and income, and do appropriate number crunching and report writing. Once again, a small group may be able to do this faster with a notebook and a pencil. But, an adviser who supervises the budgets of 25 campus clubs and groups could keep a schoolwide set of budgets on a computer and generate monthly reports for each group. "General ledger" is the generic name of the program that does this type of number crunching. It is possible for a ledger program to print out checks as well, when authorized by the appropriate student or staff member.

**Word Processing.** This is the most widely used application of computers. It is the ability for the computer to act like an electric typewriter with memory.

Logically, the groups that would make the best use of the word processing capacity would be student publications. Newspapers, yearbooks, and literary magazines are probably already using some form of word processing. The obvious benefit for student publications, beyond saving time and money, is that it leaves valuable energy for the major purpose of the activity: writing and learning about the field of journalism.

**Data Base Management.** This is a capacity of the computer that merges the previous two functions. It allows the user to store both words and numbers for instant recall.

One school was hosting a statewide student leadership conference. Using a computer, they were able to log each registration, including information on housing and special diets. Anytime that they needed a list, such as students driving to the conference from the southern part of the state, it was a simple matter to get a customized printout.

In previous years, these tasks were done by hand. They consumed dozens of hours of volunteer time and needed information frequently wasn't compiled because it took too much effort. Data base programs can be great workers in your clubs and organizations. They love to sort, alphabetize, and rearrange information according to your every whim. This is one of the most powerful programs for student activities.

**Telecommunications.** Computers can "talk" to other computers, usually by using regular telephone lines. This aspect of computer technology is referred to as "computer networking."

Number crunching, word processing, data base management, and telecommunications are the four major functions of computers in the student activities field. There are many variations on these themes; you can use commercial software programs or write your own special programs.

In a nutshell, computers and student activities become a reality in your school as soon as you discover one or more uses for the technology. The following chapters will define ways to use each of the major computer functions as well as provide a structure for successfully introducing the technology to your clubs and organizations.

# TECHNICAL INFORMATION

(This section provides the novice with a short introduction to the world of data processing. If you already have a fair amount of experience with microcomputers you may want to move to the next chapter.)

It is important to realize that you do not need to become a technical expert to effectively use a computer, just as you do not need to understand the internal combustion engine in order to drive a car.

The essential elements of the computers that you will be using in student activities are:

- **Memory**
- **Video Screen**
- **Keyboard**
- **Disk or Cassette**
- **Printer**
- **Modem.**

Let's start with the memory, or brain, of the computer. The machine contains a set of silicon chips that are the brain cells of the computer. These memory units, called the Central Processing Unit, provide the computer with both short-term memory and the ability to do calculations such as addition and subtraction. Each brain cell is called a byte, and most computers used in schools have a memory of from 16,000 to 256,000 bytes. Another way to express memory size is in kilobytes, or thousands of bytes. The common term for

this larger expression of memory is a K. So, if you have a computer with 128,000 bytes of memory, it would be known as a 128 K machine.

The size of the memory is important only in terms of the programs that you will be running on the computer. Some computer programs, such as a word processing package, require large amounts of memory. The chapter on finding a computer will explore this consideration in greater depth.

Most computers use a video screen to display information for the user. The screen displays the instructions that you give the computer and also displays the computer's responses. Many computers can be hooked up to a regular television set, although the display may be a little fuzzy when working with large amounts of text. The newer computers are now coming with color and high-resolution screens to do complicated graphics and game routines.

The keyboard is a vital part of the computer hardware. Recently, however, computers have been introduced that allow the user to touch the screen in order to provide instructions. As the technology evolves, we will see computers that will respond to spoken commands.

Disks and cassettes are used for longer term memory. The central processing unit of the computer will not retain its memory after you turn off the machine. Data can be stored on either a tape cassette or a floppy disk. The cassette looks and acts just like the tapes that are used to record music. Instead of tunes being placed on the tape, a high-pitched tone that contains data from the computer is recorded. This can be understood by the computer when it is played back.

The floppy disk is a much more efficient, although more expensive, way of storing data. The disk is a flexible piece of plastic, usually about three inches wide, that functions more like a record than a tape. It is placed in a disk drive and spins at a high speed. The drive machine has a "head" that can read or write on any track of the disk. This allows for much faster access to data and the ability to change just one number on the disk. (If you want to alter one piece of data on a cassette, you will need to record the entire set of information again.)

You can choose to have data displayed on the screen or printed out on the printer. There are a wide range of printers on the market, from fast machines that print words in a dot-matrix form:

```
This is DOT-MATRIX printing.
```

to letter quality machines that print just like a typewriter:

```
This is LETTER-QUALITY printing.
```

Modems are the last device that we will discuss. These allow you to send information from one computer to another, using the telephone lines. There is a full explanation of the modem in the chapter on telecommunications.

The devices described above are known as computer "hardware." Software includes the programs and instructions that give the computer the ability to solve problems for you.

There are three basic types of software:

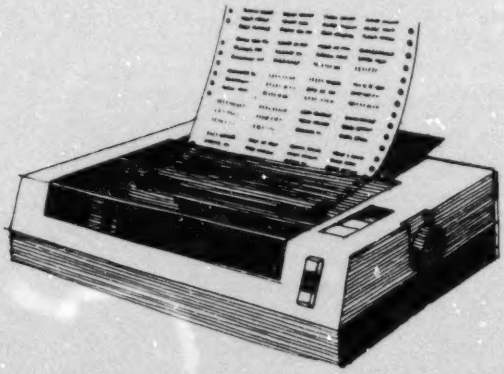
•**Operating systems:** These are the basic instructions that tell the computer how to communicate with you and give it the ability to use its various parts. Think of the operating system as the first 80 points of an IQ score. The operating system provides the computer with the ability to talk, walk, think, and function. However, it is not equipped to do any specific task at this point.

•**Languages:** These are the sets of words that the computer recognizes when it tries to communicate with you. There are many different computer languages available. If you can speak English, you may not understand French. Likewise, if you can program in BASIC, you may not understand COBOL. There are also dialects of languages. Therefore, you must be sure that you are using the right BASIC for your operating system. This is often just a simple matter of learning a few changes in words, but the computer has little tolerance for mistakes when it comes to communications.

•**Programs:** Here is where the computer starts to work for you. Programs are written in a specific language and give the computer detailed instructions to do a task.

Most of the work that you will be doing at the start of this project will be done on commercially produced programs. Almost every program you will need in student activities is already written. However, as you get into the use of computers, you may want to write your own programs.

# WORD PROCESSING



This chapter will explore word processing and how it can be used in student activities. The word crunching capacity of computers is a changing concept. As recently as 1978, if an organization wanted to do its typing electronically it was necessary to purchase a machine called a word processor. Compared with the price of an office typewriter, this device was beyond the reach of most organizations.

With the advent of the microcomputer revolution the phrase "word processor" came to mean a specific piece of software that could be used on almost all microcomputers. The word processing capacity then became affordable for most organizations.

What does a word processing program do? There are four main functions in every word processing software program:

- Words can be typed on the screen.
- Words can be saved on disks or cassettes.
- Words can be changed at any time.
- Words can be printed at any time.

Word processing programs are marketed under many different names. Some of the most popular ones are called WORDSTAR, SCRIPSIT, APPLE WRITER, MAGIC PENCIL, and THE WORD. When selecting a program, you need to determine if you have the right machine to operate the program. There are some programs that are available in versions for most computers, such as WORDSTAR. Others, like SCRIPSIT, may only be compatible with one brand of computer.

You will also need to investigate the memory and storage requirements of each program. Additionally, your printer must be able to understand the commands sent by the word processor.

Most word processing programs are contained on disks. Some word processors operate with tape cassettes, but these limit the amount of editing that can be done easily. The disk is placed on a disk drive, enabling the computer to read the instructions and become a word processing machine.

Pretend that you are sitting at a microcomputer with a word processing program. (From here on, we will refer to word processing as WP.) The WP program will probably have a list or menu of choices for what you want to do with your writing. The names of these choices may change from WP program to program, but most have the following abilities:

•**CREATING A FILE:** The words you write will be stored in a file. Since most WPs allow you to store or save many different files, you will be asked to give it a name. You will also have a chance to assign a password to this file. This is your secret code for restricting access to this information. Take time to think about the use of passwords. People need to feel secure about the privacy of their information. You can request a directory of all the files, which will give a list of the various letters or documents that are available

on that disk. For example:

```
File Directory.................Disk One A
File Name            Author    Size  Date
-----------------------------------------
Telecommunications   Elliott   4506  8/15
DataBases            Michele   7650  8/17
WordProcessing       Michele   8124  8/15
Letter2              Elliott   1022  8/01
Tablecont            Elliott   1004  8/15
Summary              Michele   2347  8/16
```

**•FORMATTING A DOCUMENT:** WPs give you many options for how you want the finished product to look. There are options for setting margins and tabs, centering text, indenting for paragraphs, and a host of other design features.

If a school newspaper were using the WP to write articles, they might set the margin at 13 picas across. This is the approximate number of spaces in a column and would give them a sense of how many lines a specific article would fill. One of the nice features of a WP is that you can change your mind! A piece of text might look something like this:

> Yesterday, the women's volleyball team won a stunning victory over last year's division champions. Although trailing midway through the game, our team came through at the end and won this year's championship title.

And with a push of a few buttons, this can be reset to cover two columns across (24 picas):

> Yesterday, the women's volleyball team won a stunning victory over last year's division champions. Although trailing midway through the game, our team came through at the end and won this year's championship title.

Most WPs allow each file to have multiple pages of information. You will need to figure out how many lines per page you will want and how much room a headline or letterhead might require.

•**ENTERING TEXT:** Fingers often do not work in the same way that the mind does. A WP will allow you to easily correct your mistakes, however. Erasing a word is as simple as pressing the backspace key a few times. Most WPs have special keys or commands that will allow you to insert text when you forget a word, letter, or even a whole paragraph. A different key will allow you to delete. Several WPs give you the ability to keep typing without having to hit the carriage return key. If you have set the margins at 60 spaces, it will type the right number of characters and then jump to the next line. This is called "wrap-around." If you delete a few words, the whole page will rearrange itself automatically.

•**EDITING FEATURES:** We have already touched on some of the editing features, such as edit and delete. Some WPs have as many as 40 different commands. These include:

—**Search.** You enter a word, such as "baseball," and the computer will search through several pages of text, until it finds your word. A blinking dash, called a cursor, serves as your electronic pencil point, indicating the place where your typing will appear on the page.

—**Search and Replace.** Perhaps you want to change the announcement about basketball practice to baseball practice. This command will find every place where you have mentioned basketball and turn it into baseball.

—**Cut and paste.** When you are writing the minutes from a club meeting, you may want to move some of your material. You can tell the WP to move a word, sentence, paragraph, or whole page from one place to another.

—**Line, word, or character count.** This is a very useful function for a student publication. Often a story is written for a specific amount of space. The computer will keep a running count of how many words, lines, or characters you have used.

—**Hyphenate.** This feature will allow you to make choices about which words can be split at the end of a line. Most WPs will give you that choice for each line that looks like it might be a candidate for hyphenation. Some new WP programs have a list of words, with proper hyphenation, and will do so automatically.

–**Spelling Checker.** This program contains a dictionary with between 50,000 and 100,000 words. When you ask the WP to do the spelling check function, the computer takes each word in your file and sees if it has that word in the spelling file. If it is there, it goes on to the next word. If it is not there, it highlights the word in a different color and asks if the word is correct. Many words are not in the file, such as proper nouns and technical or slang words. If you tell the WP that a word is spelled properly, it will add it to the file. A few spelling programs will even suggest the proper spelling of a wrong word.

–**Automatic letters.** This program enables the computer to generate personalized letters. For example, it is the day after a debate among the candidates for local office sponsored by your political science club. Now it is time to send out thank you notes. Chances are the letter will be basically the same for each candidate. The automatic letter writing

feature allows you to give the computer a list of the names and addresses for each person to receive a letter, along with some specific references that will personalize the note.

Here is an example:

[Name]
[Address]
[City, State]

Dear [Name]:

The members of the Political Science Club at Abington High School would like to express their appreciation for your participation in out election debate.

As a candidate for the office of [office name], you are aware of the need to reach the electorate with your positions on the issues. The 200 students at the debate are the future voters of this community and are deeply grateful for the opportunity to have heard your views.

Best wishes,

Jim Schwartz
President, Political Science Club

The WP will change the words in the items indicated with brackets for each letter that you want to send. You can save this information in another file if you send these types of letters to people on a regular basis. This WP application is also perfect for fund-raising and other such activities.

There are many other automatic WP features. We have described the basic ones and those that will be most valuable to a student organization.

Here are some others:

**•SAVING FILES:** If you are not finished with a document and you need to go on to something else, WP will save the information that you have entered so far on a disk or a cassette. Each disk can hold the equivalent of 30 or more pages of information. Some of the newer, high-density storage disks can hold almost 100 pages of information. It is a good idea to create a table of contents for the various documents that are stored and to label each disk clearly so that documents can be found quickly.

**•CHANGING FILES:** At any time in the future, you, or another person with the password, can look at the information in the files and use any of the editing features to change it. A drama club may be writing a play for a spring show, for example. At each rehearsal session a few things in the play might be changed. One student could easily change the file with the script and make a copy for each of the players.

**•PRINTING THE TEXT:** You have an almost endless set of choices for how the material will look as it comes out of the printer. It could be double spaced with any type of margin, with phrases underlined, or in bold face. Different printers will allow you to do a host of other things with your text. There are even new printers that will type the text so it looks like it has been typeset.

One of your options is to request justification of the text. Do you want the right margin of the text to look ragged like typewritten copy, or do you want the right margin to be justified, or even, like the left margin? The WP will add spaces between the words, or even between the letters on some printers, to accomplish this. Some clubs use this feature to lay out their newsletters.

•**TRANSMITTING THE TEXT:** After you have developed a text file, you can send it to another computer, anywhere in the world, using telephone lines. Why would you want to do that?

Let's say you are planning a regional workshop with another school in your area. You could call them up and send them a copy of the announcement that you are getting ready to print. The copy from your WP would appear on their screen and they could send back comments and revisions. We will discuss other applications of this capacity in greater depth in the chapter on communications.

Typesetting companies across the country are gearing up to handle text that is composed on their customer's WPs. It will not be long until you can lay out your yearbook on the computer, add special layout codes, and send it by telephone directly to the typesetting machines.

**How To Choose a Word Processor**

While we have outlined many features, there are not that many basic differences between one WP program and another. Your school or someone you know may have a WP program that you can use, or you may choose to purchase a new one. The criteria that you should look for are:

•**Ease of use.** The WP should be relatively easy to use and have simple commands.

•**Password protection.** If you are not going to have password protection, each user needs his or her own disk. It is cheaper to use passwords and share a disk.

•**Compatibility.** Does the program work on your computer? Does the program work well with your printer? Some printers have special features, such as bold type, that will only be activated by certain WP programs.

# NUMBER CRUNCHING

Computers are great number crunchers. Give your microcomputer a few numbers and it can do addition, subtraction, multiplication, division, and all forms of more complex math. So what? Your calculator does the same thing, you say. In many ways, the computer is just a sophisticated calculator. What makes the computer more sophisticated is its speed, its memory, and its ability to mix words with numbers.

A good illustration of number crunching is to show how a student council could project its finances for a homecoming weekend. A homecoming can be a complicated event if there are three different major activities: a school play, a carnival/fair, and a dinner dance.

The program that you would use is called a financial spreadsheet. In other words, the computer creates a large, electronic piece of paper on which it can do all sorts of calculations. This spreadsheet goes by many different trade names. The one that we will use for illustrative purposes is called VISICALC.

The power of VISICALC (which we will call VC) is its ability to set up columns of numbers and information. The computer will remember the numbers that you enter and will do any calculations requested. The first step in setting up VC for this project is to define the major categories of figures that you will be entering. We will need to track the income and expenses for each of the weekend's three events.

Once you load VC into the computer, the screen will look like a grid ready to be filled in:

Homecoming Financial Spreadsheet

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |

Each box on the grid has coordinates consisting of a letter and a number. Either words or numbers can go into these boxes.

The first step will be to define the various events of the weekend:

Homecoming Financial Spreadsheet

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | PLAY | CARNIVAL | DANCE | OTHER |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | | | | | |

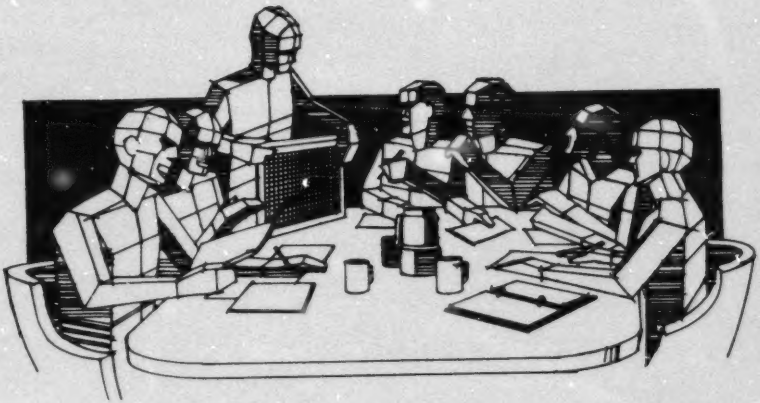
Next, the specific expenses and income items are listed in column A. We will show only a few of the expenses, but the actual spreadsheet would have many more entries. Here is how the spreadsheet looks at this point:

Homecoming Financial Spreadsheet

| | A | B | C | D |
|---|---|---|---|---|
| 1 | | PLAY | | |
| 2 | Public Relations | 100 | | |
| 3 | Costumes | 150 | | |
| 4 | Programs | 50 | | |
| 5 | Total Expenses | 300 | | |
| 6 | ---------- | ---------- | | |
| 7 | Price Per Ticket | | | |
| 8 | Student's Price | .75 | | |
| 9 | Other's Price | 1.25 | | |
| 10 | Tickets Sold | | | |
| 11 | Student Tickets | 200 | | |
| 12 | Other Tickets | 400 | | |
| 13 | Total Income | 650 | | |
| 14 | ---------- | ---------- | | |
| 15 | Profit or Loss | 350 | | |

You can instruct VC to do any type of calculation involving one or more cells and place the answer anywhere in the spreadsheet. For instance, the total of expenses, box B5, is determined by adding the contents of B2, B3, and B4. Once this formula is entered, changes in one or more of the numbers in the formula will automatically alter the total in B5.

If we filled in the rest of the expenses and income for the weekend we would have a complete spreadsheet.



If the organizing committee wanted to ask several "what if" questions about the possible finances of the weekend, it would be a simple matter of trying different

figures. By changing the number of people attending each of the events, the entire spreadsheet changes:

Homecoming Financial Spreadsheet

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | PLAY | OTHER | BUDGET | PROJECTIONS |
| 2 | Public Relations | 100 | 100 | 100 | 200 |
| 3 | Costumes | 150 | 150 | 150 | 150 |
| 4 | Programs | 50 | 50 | 50 | 50 |
| 5 | Total Expenses | 300 | 300 | 300 | 300 |
| 6 | | | | | |
| 7 | Price Per Ticket | | | | |
| 8 | Student's Price | .75 | 1.00 | .75 | .75 |
| 9 | Other's Price | 1.25 | 1.25 | 1.25 | .75 |
| 10 | Tickets Sold | | | | |
| 11 | Student Tickets | 200 | 200 | 100 | 300 |
| 12 | Other Tickets | 400 | 400 | 200 | 500 |
| 13 | Total Income | 650 | 700 | 325 | 600 |
| 14 | | | | | |
| 15 | Profit or Loss | 350 | 400 | 25 | 300 |

Spreadsheets like VC can handle very large amounts of data. Some versions of VC have the capacity for 350 by 350 cells. This means that you can have more than 100,000 boxes of information, all of which can be linked together by formulas.

The numbers do not have to remain on the screen. VC will store a specific set of numbers in a file on a floppy disk or cassette. The homecoming committee can create a spreadsheet and check back at every meeting to see if their financial projections are on target. Whenever changes are made, the new spreadsheet can be stored.

The spreadsheet can also be printed out on paper. You can tell the computer if you want an entire spreadsheet printed out or you can ask for just one segment of the file. For example, it is possible just to get the calculations for the play or carnival.

Some spreadsheet programs also provide a graphics option. This allows the user to request the results in a graphic form.

One other type of number crunching program that you will find helpful is called a general ledger. This program can keep track of many different financial accounts. A school could set up a general ledger with each club having a separate account. A list of accounts might look like this:

```
        Stuyvesant High School
          List of Accounts
-------------------------------
1000        General Fund
1100        Yearbook
1200        Orchestra
1300        Student Council
1400        Foreign Exchange Club
```

A school could have as many as 100 different accounts. Each time money was collected or spent, the general ledger would alter the accounts and keep a record of the transactions. This program can help keep track of the money that is spent by various clubs. At the end of a year, it is a simple matter to get a detailed analysis of how the money was spent by type of expense or type of activity. Some general ledger programs also allow the user to print checks.

Modified general ledger programs can be used to keep track of the money taken in by the student store. A microcomputer can substitute for a cash register, keeping detailed records of everything sold in the store, from class rings to pencils.

We have found that as students get accustomed to using number crunching programs they become much better planners. The computer simplifies questions about how to use limited financial resources.

Math anxiety causes some people to shy away from using computers. Several number crunching programs can help even the most reluctant math student start dealing with the world of numbers.

# DATA BASES

This chapter will explain a special type of program called data base, or DB. A data base is an electronic list that can help you with names, places, events, etc. Why not just write it down on paper? You should if your list is a short or simple one. However, if you want to keep a long detailed list with a variety of information that will be needed over a period of time, a DB is ideal.

To illustrate, let us imagine using a computer to keep track of students registering for an upcoming senior trip to Washington, D.C.

If you choose to go the DB route, your first step is to select a DB program. In this example, we will use PROFILE, which is manufactured by Radio Shack/Tandy.

A data base program will ask you for certain information as you begin setting up the program. The first thing you need to do is name the file. Each data base is called a file. Since you can store several files of data per disk, it is important to distinguish one from another. We will call this file CLASSTRIP.

When you want to look at a file again later on, you will refer to it by name. Some DBs allow you to enter a password here to give an extra measure of security.

Although it is possible to change your mind and add additional data at a later date, it is best to think about what types of information you want to store before you begin.

Each piece of information is called a field. The following is a list of fields for our trip:

| FIELD NAME |
| --- |
| Last name |
| First name |
| Street address |
| City, state and zip |
| Home room |
| Home telephone |
| Emergency telephone |
| Name of parent(s) |
| Amount paid to date |
| Roommate preference |
| Roommate assignment |
| Kennedy Center tour |
| FBI building tour |
| Hotel room |
| Bus assignment |
| Permission slip |
| Special needs |

We may need other information as we go along, but this appears to be a full set of data in order to plan for this file. PROFILE required us to name each field, and to indicate whether the information will be numbers, letters, or numbers and letters. The computer stores the information differently depending upon the nature of the data in the field.

PROFILE also needs to know the length of field. This means the maximum number of characters we are allowing per field. For something like housing assignments, this is easy. All rooms are designated by a room number, and all of these are three digits in length. So, the maximum length will be three.

But, what do you do about the last name field? This presents a slight problem. Ideally, we could check the length of the longest name and use that as our criterion. You can't always know in advance, and this is one of the trickiest parts to change on a DB once you've started. You'll need to do some good guessing or just be content with abbreviated names.

For our CLASSTRIP DB, this is what the field might look like:

| FIELD NAME | TYPE | LENGTH |
|---|---|---|
| Last name | C | 15 |
| First name | C | 10 |
| Street address | C | 25 |
| City, state and zip | C | 30 |
| Home room | N | 3 |
| Home telephone | N | 10 |
| Emergency telephone | N | 10 |
| Name of parent(s) | C | 20 |
| Amount paid to date | N | 4 |
| Roommate preference | C | 15 |
| Roommate assignment | C | 15 |
| Kennedy Center tour | C | 1 |
| FBI building tour | C | 1 |
| Hotel room | N | 3 |
| Bus assignment | N | 1 |
| Permission slip | C | 1 |
| Special needs | C | 35 |

(N=NUMERIC DATA C=LETTERS & NUMBERS)

Once all the information is entered into PROFILE, the CLASSTRIP DB has been created.

In most DBs characters refer to any fields that are not all numbers. There were several items, such as "Permission Slip," that have a length of 1. These are for yes or no questions where you can respond with a y or n. The last category is a general field to hold any information that might not be included in the other fields, such as special health or diet needs.

Some DBs will have 500 fields of information, and others, like a mailing list, will have only four or five. Once we finish setting up the DB, the next step is to enter the information for each student going on the trip. Each will have a separate record, which is equivalent to an electronic file folder. Here is an example:

| FIELD NAME | INFORMATION |
|---|---|
| Last name | Jones |
| First name | Sheila |
| Street address | 2 Main Street |
| City, state and zip | NY, NY 11111 |
| Home room | 214 |
| Home telephone | 212-255-1234 |
| Emergency telephone | 212-555-7875 |
| Name of parent(s) | Diane and Bob |
| Amount paid to date | 25.00 |
| Roommate preference | Robin Brown |
| Roommate assignment | Jill Breen |
| Kennedy Center tour | Y |
| FBI building tour | N |
| Hotel room | 731 |
| Bus assignment | 2 |
| Permission slip | Y |
| Special needs | None |

This information will be filled out during the course of several weeks. Some data, such as name and home room, can be entered as soon as the students return their permission slips. Data can be changed or entered at any time. Each DB program, of course, has different procedures.

Our class trip example uses 200 names. Thus, there are 200 records in CLASSTRIP, and each has 18 fields of information. Now you can begin to appreciate the power of the data base application.

We can check any record at any time. If we want to see how much a student has paid, we can ask the computer to display that record. Entering a new roommate is just a matter of hitting a few buttons and typing a new name in that field.

We can also print out every student's record. You can request any type of report using any items in the data base. For example, a list of students who have not paid their fees could be generated.

```
Listing of Paid/Unpaid Students on Trip
---------------------------------------
Name              Home Room   Paid  Owes
---------------------------------------
Jones, S          214         YES
Brown, R          316               15.00
Breen, J          215         YES
```

The class trip committee is bound to generate dozens of lists while planning the event. Getting any list is simple once you understand how to use the program. The class trip can be run more smoothly, with fewer hours spent on clerical work and with more trust from the administration since the information is readily available to all who need it.

It is possible to set up a security system for the DB that restricts access to certain records or fields. For example, the special needs file might have some sensitive medical information that should not be available to just anyone. One would need the correct password in order to be able to look at such information. This function can ensure an extra level of confidentiality.

A data base can be an extremely valuable tool. It provides groups with the ability to keep very accurate and complex records and files. It allows for different people to have responsible access to the data. The data can be easily managed and manipulated by a group's organizers.

As stated earlier, it would not be worth your effort to create a DB for a handful of students. As the quantity and complexity of data increases, however, using a DB makes more sense. Other groups in a school will also find the advantages of a data base.

Yearbook staff will find it a natural. The task of compiling all the statistics on a senior can be mindboggling. Imagine how much simpler it would be to be able to go to the computer and call up the following information:

- activities.
- honors awarded.
- future plans.
- mailing address, phone number.
- senior portrait information.
- yearbook ordered/paid for?

A school can collect information on each student's activities and generate an activity transcript that could be sent along with an academic transcript and college application. A DB could be used for this purpose, and also could provide most of the information needed by the yearbook staff.

```
        Adirondack High School
Official Student Activities Transcript
++++++++++++++++++++++++++++++++++++++++
Student: Kim Lee  Graduation Date: 6/85
----------------------------------------
Year    Activity                [Awards?]
++++++++++++++++++++++++++++++++++++++++
Fresh   Freshman Class Council
Soph    Sophomore Class Council
Soph    Track Team                [Award]
Soph    Community Service Club
Jr      School-wide Student Council
Jr      Attended NASC Natl. Conference
Sr      Senior Class Council
Sr      International Club        [Award]
```

A nice feature of a DB is that it can communicate with a word processing program. When you have all the stats on every senior, you can request that the printout be arranged in alphabetical order, according to the format of your yearbook. You can have the DB print this on a disk rather than on paper, and arrange a computer hook-up with your publisher. This way, you only need to type your data once. Not only will you save hours of labor, but your data will be easier to gather and simpler to check.

A service club that is running a tutorial service would welcome the help of a DB. Each student needing help could list his or her problem subjects, specific trouble classes, and preferred time to be tutored. Student helpers could list their areas of proficiency, available time, etc., and the computer could match them up.

A DB can begin helping your student group in a matter of days. There are, however, a few words of caution. Make sure you have a good system for making a back-up copy of your DB. This should be updated regularly and kept in a safe place. Computers can malfunction, and you don't want to risk losing all your records. It is also a good idea to keep the original papers that the data were collected from. That way if there is a mistake or question about something on the DB, there are a few ways to check it out.

# TELECOMMUNICATIONS

Student activities groups, through the innovative use of computers, can join the communication revolution. In order to get started, you wi" eed a computer terminal, a telephone, and a special device called a modem. The modem allows computers to communicate with each other via a standard telephone line.

Computers can send signals to a printer, causing words to be typed on paper. These same signals can be routed through a modem, which then sends audio tones over the line to another modem. The second modem translates these tones into electronic pulses the receiving computer can understand.

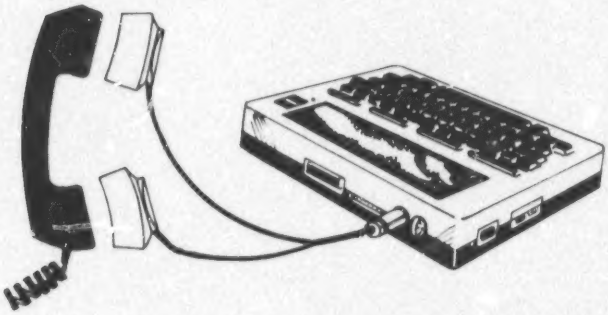
Given the current state of the art technology, you can communicate using computers in the following ways:

Microcomputer to microcomputer
Microcomputer to main frame computer
Microcomputer to data base
Microcomputer to communications network.

We will illustrate the various ways these technologies work in the student activities area:

•**Micro to Micro.** The adviser of the debate society is trying to organize next year's schedule. She needs to have the dates of the various competitions approved by her counterparts at several other schools. Using word processing she develops a tentative schedule.

Then, she telephones an adviser at a school across the state. Both parties hook up their microcomputers and in about one minute, a several-page schedule is sent. They can either talk about it on the phone or revisions can be made and the suggested schedule sent back in the same fashion.



Clubs can use this method to send data or text to another site. As we mentioned earlier, student publications may use this method to send copy to the printer for typesetting. If a reporter for your student newspaper is covering an away game, the story can be transmitted if that reporter is equipped with a portable computer. (We will discuss an alternative to conventional long-distance telephone connections in a few paragraphs.)

•**Micro to Main Frame.** Some schools may subscribe to a large computer service from a regional educational organization. If your school has access to one of these large computers, a microcomputer can

be hooked up to this larger computer. A micro can be linked with a main frame computer, via telephone lines, and can function the same way a terminal does in the computer center. This is a way for a micro to enjoy the best of both worlds of computing. It has the portability and availability that may be lacking in a main frame, but can easily access the computing power of a larger machine.

Usually this method will require special approval from the computer center and will involve a password protection system. Sometimes you will access the main frame for only a few minutes and will then do the rest of the computing on your micro. For instance, the treasurer may want to get a copy of the current account balances from the main frame. This information can be "downloaded," or received from the other computer. The treasurer then disconnects from the main frame and manipulates the data using a spreadsheet program on the micro. This approach saves the communication charges and any charges for the use of the main frame.

**•Micro to Data Base.** Sometimes the data that you need are not available on your disk. In the previous example, the treasurer accessed a special data base called STUDENT ACCOUNTS. Micros, through the use of communications, can access tens of thousands of data bases of information located on other computers around the world.

If the student council were getting ready to send a team to the annual NASC Conference, they could contact the Official Airline Guide Data Base. This is a commercial information service that stores information about every flight in the world.

Other data bases that might be of interest to student groups include:

| | |
|---|---|
| Encyclopedia On-Line | Debate Society |
| Latest Stock Prices | Business Clubs |
| UPI or AP News Wires | Newspapers |
| Magazine On-Line | Radio Station |
| Movie Reviews | Entertainment |

A number of data bases can be accessed through a computer service such as CompuServe, SOURCE, or Dow Jones News. These companies will give you a single number to call and request hundreds of other data bases. This way you only have to establish one account and can pick and choose the types of information that you need.

One caution to student groups: Watch the cost. It is easy to forget that the clock and cash register are ticking when you are hooked up to a data base. Most of the services that student groups use are in the range of $5 to $10 an hour, or even may be free, but you will need to establish a policy for monitoring these costs.

•**Micro to Communications Network.** All of your communications could be direct connections between your computer and another computer. Or, you could join one of the new communication networks that change the mode of the connections.

These electronic mail systems will change the way in which organizations and people communicate. As more computers with modems are available in homes and offices, electronic messages will start to replace paper and envelopes. The message is delivered instantly, the cost can be quite low (between 10 cents and two dollars, depending on the system used and the length of message), and it is possible to send the same message to several or thousands of users with a single-line instruction.

Most mail systems also have an interest directory, where users can find out about other users and send them a message to start an "electronic network relationship." This capacity would allow student activities groups to access their counterparts all across the country. Several of the networks are international; thus, an international club could set up global conferences using the computer.

This is a field that is blossoming every day. Starting with local networks and building to national networks of student organizations will create many new innovations in the student activities field. Imagine the day when state student council associations can hold low-cost committee meetings throughout the year, using telecommunications. Or, when you can request information on any student activity program from a central computer data bank.

# SPECIAL PROGRAMS

The previous chapters focused on ways to use popular software packages such as word processing and data base management. Many of the uses for computers that will arise in a school can be handled by writing a small, specialized program.

For example, one student group wanted to use a computer to keep track of all concert ticket sales and to serve as a cash register in the ticket booth. This application is really a combination of the number crunching, data base management, and word processing capacities of a microcomputer. They checked with the local computer dealer and could not find a program that would do all of these things. So, a few students took on the task of writing a program themselves.

Using the computer language BASIC, they developed a program they nicknamed CONCERT-MANAGER. After loading the program onto the disk, they had the computer display the following menu of choices:

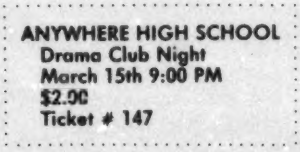
```
CONCERT-MANAGER PROGRAM...ABC HIGH SCHOOL

-----------------------------------------

     *PLEASE CHOOSE ONE OF THESE PROGRAMS*

          1) Print Tickets

          2) Sell Tickets

          3) Check Availability of Seats

          4) Refund Tickets

          5) Tally Day's Ticket Sales

          6) Print Summary of Total Sales

     ENTER YOUR CHOICE HERE: _____
```

Each of the menu choices takes the user to a different program. The first option will print out tickets, the second will record the amount of cash taken in on each sale, etc.

To illustrate how easy it can be to develop a special program we are including a sample program that will print simple tickets for an event. This program would have been included as a part of CONCERT-MANAGER. The program is written in BASIC, and could be run on most computers.

```
10 INPUT "HOW MANY TICKETS ",T

20 INPUT "WHAT IS THE NAME OF THE SCHOOL",S$

30 INPUT "WHAT IS THE NAME OF THE EVENT",N$

40 INPUT "WHAT IS THE DATE OF THE EVENT",D$

50 INPUT "WHAT IS THE TIME OF THE EVENT",T$

60 INPUT "WHAT IS THE PRICE PER TICKET",P$

70 INPUT "PRESS ENTER TO BEGIN PRINTING",R$

80 FOR A=1 TO T

90 LPRINT S$

100 LPRINT N$

110 LPRINT "DATE: ";D$;"   TIME: ";T$

120 LPRINT "PRICE: $ ";P$

130 LPRINT "TICKET NUMBER : ";A

140 LPRINT:LPRINT:LPRINT

150 NEXT A
```

The program will fill in the information that you input, including the name of your school, event, date, time, and price per ticket. It will automatically number the tickets. The program could be adapted to include seat information or other details needed by the entertainment committee.




There are thousands of programs available from private and commercial sources. Check computer magazines for listings of these software packages. You might find that a student group at another school has already developed the package you need. Or, you may be able to buy a program and adapt it slightly to fit your needs.

Another type of special program is the WINDOWING feature. Windowing is the ability of the computer to display information from several different programs on the screen at one time. For example, you may want to type a letter to someone using the information from your data base. Without windows, you would need to load the data base, look up the information, and then retype it after you have loaded the word processing program. Windowing creates several boxes on the screen that will display information from the DB and allow you to move it to WP quite simply.

Windowing is found in a number of the integrated applications packages. These are groups of application programs sold under one name. One of the most popular ones is called Lotus 1-2-3. This program contains a word processing package, a graphics package, a data base management package, and a financial spreadsheet. The data from one of these packages fits perfectly into the other packages. If your student groups are going to purchase a software package, we would suggest that you look into one of the integrated packages.

Instructional programs are another powerful computer application. The computer can be used as an instructional tool to teach a wide range of topics. Information can be displayed on the screen, questions can be asked of the user, and remedial drilling can be prompted automatically. You might think about developing an instructional package to teach club treasurers how to submit their budget requests to the student government, or you could develop a teaching program on parliamentary procedure. Often called Computer-Assisted Instruction (CAI), this approach can be a powerful addition to the student leadership development toolkit.

Games are another special application of computers to the student activities area. During a fund-raising carnival, a computer video game could be used to raise money for a club. Some computer games can be developed that also have an instructional slant.

Voting can be computerized in a variety of ways, ranging from using the computer to count paper ballots to using terminals as actual voting booths.

Computer-generated graphics can be used to present financial information. Computer-created graphics can speed the budget consideration process and also demonstrate how funds will be spent by each group.

Computer terminals placed around the school can be used to show the latest news, pulling information directly from the UPI or AP wire, as well as displaying information entered by the director of student activities. A number of schools are displaying the calendar of events on computer terminals. The terminals could access a data base of scheduled events several weeks or months in advance. That way, a student could check what might be happening by activity or by date.

These are just a few of the types of special programs that can be used in high school student activities. We encourage schools to start developing their own software and to share programs with other schools across the country.

# ACTIVITY IDEA SHEETS

The following is a collection of ideas for using the computer in a wide range of student activities. We offer these suggestions as a starting point. Each major activity area has its own list of ideas. These ideas are clustered around the four main functions outlined in this book:

Word processing

Number crunching

Data base

Communications

The idea of using a computer in a club or organization may seem abstract until you see how it can help your group. If your club or group is not listed here, scan all of the lists for activities that you could adopt. We encourage you to add ideas as you get involved in this concept.

## Performing Arts

**EXAMPLES:** Drama Guild, Marching Band, Art Galleries

**Word Processing:** Writing and editing scripts; printing programs and tickets; disseminating publicity for the local newspaper

**Number Crunching:** Projecting costs and income for shows:: budgeting for a band trip to an away game; handling inventory for an art show.

**Data Base:** Cataloging sheet music for the orchestra; generating lists of museums, auditions, area performances; listing available stage hands, lighting crew members, and props

**Communications:** Arranging concert dates for the chorus, band, and orchestra; exchanging sheet music through a network, finding out about national arts opportunities

## Publications

**EXAMPLES:** Newspapers, Literary Magazines, Newsletters

**Word Processing:** Writing and editing articles; calculating word count for layout; checking spelling; designing layout

**Number Crunching:** Calculating advertising expenses and revenue; comparing printers' bids; developing graphs to use as part of layouts

**Data Base:** Student activity transcripts for inclusion in yearbooks; membership rosters for groups; merchant lists for ad solicitation; school history and trends

**Communications:** Accessing wire services; sending copy to printers for typesetting; placing coming events on community cable TV stations.

## Common Interests Clubs

**EXAMPLES:** French Club, Business Clubs, Future Homemakers

**Word Processing:** Printing newsletters for members; sending invitations or thank you notes; writing reports or proposals for new projects

**Number Crunching:** Calculating costs of holding a party; budgeting for bus transportation to a rally; setting up a scholarship fund

**Data Base:** Compiling a speakers bureau; listing possible internship or job opportunities; creating a skills bank

**Communications:** Hooking up with similar groups at other campuses; accessing foreign newspapers via networks

## Student Councils

**EXAMPLES:** Student Government, Class Councils

**Word Processing:** Recording and publishing minutes of meetings; writing newspaper and yearbook articles and editorials; drafting letters to community groups

**Number Crunching:** Planning budgets; tracking leadership or service points; tallying votes or opinion polls

**Data Base:** Student activity transcripts; listing fund-raising activities

**Communications:** Accessing student leadership networks; filing applications to national conferences and events, creating regional idea-sharing networks

# GETTING STARTED

Are you ready to start using computers in your high school's student activity program? This chapter will take you through the steps that will make this project a success.

Here is a suggested outline of steps to follow:

**1. Educate people about this idea.** Share this handbook. Share the ideas in this book with your school's computer coordinator. Highlight some of the examples listed in this book and talk about the ways that computers can help student activity programs.

Be careful not to sell the idea too hard. Let people discover the positive aspects of this project by reading and talking about the ideas.

**2. Create a committee of students, advisers, and computer resource people to coordinate the start of this project.** This group should represent a wide range of interests and groups. Be sure to include both computer "experts" as well as students and advisers who are just starting to learn about the potential for using this technology. This group can carry out several of the next steps of the planning process.

**3. Poll club members to determine interest in using computers in each organization.** Talk to the officers and advisers of each school group. Give them a brief description of some of the things that computers can do for their organization. Find out some of the following information:

•How are they currently doing these tasks and what are the implications (positive and negative) of switching to computers?

•Are there a few students in the club that are interested in learning about computers?

•Is the adviser comfortable with the idea of using computers in the group's activities?

Conducting this poll will generate interest as well as valuable information. Be sure not to promise too much at this point. Tell people that you are looking into the possibility of using computers in some of the school's activity groups and that you will get back to them.

**4. Inventory hardware and software currently available at your school.** Check with the computer coordinator and get a list of all the microcomputers that are in the building. Also inquire about the types of programs the school has for the major functions outlined above.

The next chapter will provide tips for securing the use of a computer. You will probably want to start this project by arranging to use one of the computers used during the day for instructional purposes. Most activity group use of the computers can be done in an hour or two a week, using one of the machines after school or during a free period.

**5. Decide if you want to start with a pilot group or make it available to the entire school.** There are several ways to get started with the project. The results of your poll will let you know how much interest exists at the moment. You may find that one club, such as a yearbook group, is anxious to get going. This may be a good pilot program. Work with this group and then include other groups later in the year.

Or, you may want to make computer facilities available to any group in the school. One high school made some hours available for word processing in the business lab. Student leaders could sign up for a mini-course and then arrange to use the computers for word processing during specific hours.

**6. Establish agreements and understandings on computer use and procedures.** Make sure that you are very specific on how the computers will be used. This is a new concept in the school and will need to be presented clearly.

If clubs are going to use computers in classrooms, be sure to detail the hours and procedures for their use. While there should not be great costs involved with this project, you should agree on who will pay for what supplies.

**7. Train the club members.** Hold several orientation sessions for students interested in this project. A special session for advisers would also be helpful. Your school's computer coordinator will be able to work with you to set up these sessions.

**8. Ensure ongoing supervision for the project.** This is a project that can generate a great deal of excitement and energy. It is important that at least one administrator supervise the project and provide support to the students and advisers. The committee that you formed earlier can play a very helpful training and problem-solving role for this project.

Here are a few tips to consider as you enter this new world of technology:

•Try to keep the computer buffs in your school from taking over this project. They can unintentionally scare away new users.

•Be prepared for some start-up problems. Computers are wonderful when they work and quite frustrating when they don't. Be prepared for a certain amount of early problem-solving.

•Don't be thrown by the changing technology. A new piece of computer hardware or software is introduced every day. Keep in mind that the car that you bought several years ago still serves all of your needs. It may not have the latest gadgets, but it still does its basic function. Computers are just the same. Don't feel that you have an outdated computer. All that is important is that your machine works for you. Concentrate on finding new and different uses for your equipment.

# GETTING A COMPUTER

How do we get a computer to use for student activities? This is a frequently asked question.

You do not have to go out and spend several thousand dollars to computerize your club membership lists. The route that most schools have followed is to arrange for a few hours of time on the computers that the district already owns.

While it would be wonderful to have several microcomputers dedicated to student activities, it really isn't necessary. Most clubs will only need to use the machines for a few hours a week at the most. Even the groups that will have a greater need for the machines, such as newspapers and yearbooks, can usually work around class schedules to share a computer that is already in the building.

When you do an inventory of the computers that the school owns, be sure to include every machine in the building. There are a few schools that have put some early computers on the shelf, since they are slower than the most recently purchased models. Also, include the computers that are in the administrative and guidance offices. See if you can arrange to use the machines for just a few hours a week.

When you locate a machine, negotiate its use with the current primary user. Some teachers can become very protective of the machines in their classrooms since they want to have them for the benefit of the instructional program. Schools have developed shared usage agreements with teachers, detailing some of these points:

- Hours of use
- Which students will use the machines
- Procedures for checking with the teacher before using the computers
- Supplies, and who pays for what supplies
- Agreement to repair the machine if broken by club members
- Supervision in the room, if used during after school hours.

By taking care of these details before a club starts to use a computer, you can avoid bad feelings and conflicts down the line. The contract can even be typed up and signed by the club members, the classroom teacher, and the computer coordinator.

Some schools have computer labs. These can be ideal locations for this project, but you will need to fit into a large demand for the machines. Once again, inform the teacher in charge of the computer room about your goals and objectives. The lab director probably will be one of your best supporters and will help arrange time on the machines.

If your school doesn't have any computers or you can't arrange to use the machines, the next place to look is your community. There are two free ways to get computer resources from the community: donations and permission to use. Try to locate someone who bought a computer but hasn't used it in a while. There are thousands of computers sitting idle in homes where people bought them without having a definite use for the machines. Someone may be interested in donating such a machine to the school. In some cases, a tax deduction is possible for the donation.

Local business people also may have some old computer equipment that they would like to give away. Ask around to see if anyone in your area is in that situation.

Another place to go for a donation would be the local computer dealer. Of course, a dealer would rather sell your school a machine. However, for publicity and good PR, a donation of one machine to be used for the student activities area could be a wise investment. Offer to make a large sign and generate other publicity to spread the word about a donation.

If you can't get a complete computer system donated, you can try to borrow some time on a system. Students in your school may be willing to keep some of your records on their home computer. Community libraries often have computers that can be used in the building or even checked out for a night or two. A local business may let you use its computer after hours, with the right supervision, to lay out your yearbook or work on some other large project.

If you are planning to use computers as management tools for the entire student activities program, you may want to request that the district include a separate machine in its next budget request. This machine, which could stay in the administrative or student activity office, could be used to handle all finances of the programs plus keep the school activity calendar.

Getting hardware should not be too difficult. Stay flexible in your assessment of what you actually need to get started. With a little creativity and energy, any club an get access to a computer to use for its activities.

Your school also probably has a collection of software. The business department is likely to have word processing software and may also have a spreadsheet. The district administrative office may have a financial package that you can use. Other software may be obtained through donations, or can be purchased at a low cost.

The question of software copying is a difficult one to discuss in a short space. Check to see what the software licenses allow for the programs that you own.

If you can't find a low-cost package, it may be time to write your own programs to suit the task. Students in your school will be glad to help and you can also get help from local colleges that have computer programming courses.

If there is a will, there is a way. Schools all across the country are discovering ways of providing computer time for student activities.

# SOME FINAL THOUGHTS

There are dozens of ways that computers can be used to improve the quality of student activities management.

- Computers can reduce the number of hours of clerical work needed to manage clubs and organizations.

- Spreadsheets provide students with the ability to project financial profits and losses when planning activities.

- Data bases create centralized data banks of scheduled activities and finances.

- Telecommunications opens up large networks of other students and advisers to students in any school in the country.

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NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS
1904 ASSOCIATION DRIVE RESTON VIRGINIA 22091